

19990427.ba v02\_n521.bam.990427

>From ???@??? Wed Apr 28 06:35:47 1999  
Message-Id: <199904271107.GAA23871@sco.theporch.com>  
Date: Tue, 27 Apr 1999 06:07:26 CDT  
From: Old Tube Radios <boatanchors@theporch.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: BOATANCHORS digest 2521

BOATANCHORS Digest 2521

Topics covered in this issue include:

- 1) MORE: RCA Multicoupler  
by "James C. Garland" <4CX250B@miavx1.acs.muohio.edu>
- 2) twta's, twt's  
by W0EOM@aol.com
- 3) Re: The Great Marconi Caper  
by Jerry Proc <jproc@idirect.com>
- 4) Re: The Great Marconi Caper  
by Jerry Proc <jproc@idirect.com>
- 5) info on FL2100 amp-Also FS BA's  
by "Paul Bernhard Sr." <w2tu@email.msn.com>
- 6) Old Sylvania Tube Manuals  
by W6cds@aol.com
- 7) Info "Tower"  
by "Thomas Lemar" <twl@nccoast.net>
- 8) Re: Receiver alignment-What did the factory use?  
by Kim Herron <kherron@voyager.net>
- 9) Email Problem Fixed  
by David Stinson <arc5@ix.netcom.com>
- 10) RE: Vintage Mobile rigs  
by "Roger A. McCarty" <rmccarty@earthlink.net>
- 11) Performance Test: RCA Multicoupler  
by Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
- 12) Re: Receiver alignment-What did the factory use?  
by "Roberta J. Barmore" <rbarmore@indy.net>
- 13) Re: Receiver alignment-What did the factory use?  
by "Roberta J. Barmore" <rbarmore@indy.net>
- 14) Trochotron  
by Morris Odell <morriso@vifp.monash.edu.au>
- 15) Re: Receiver alignment-What did the factory use?  
by "Arden Allen" <gumbear@pacbell.net>
- 16) Re: Trochotron  
by Bill Hawkins <bill@iaxs.net>
- 17) Re: Receiver alignment-What did the factory use?  
by Al Klase <skywaves@bw.webex.net>
- 18) Back from vacation in UK

by Peter\_Simpson@ne.3com.com

-----  
Message-Id: <v0310280bb34a756954c8@[134.53.4.141]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Date: Mon, 26 Apr 1999 14:57:29 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: "James C. Garland" <4CX250B@miavx1.acs.muohio.edu>  
Subject: MORE: RCA Multicoupler

I forgot to mention the URL, where you can take a peek at the unit:

<http://www.falls.igs.net/~testequipment/cu5069.html>

73,

Jim W8ZR

-----  
From: W0EOM@aol.com  
Message-ID: <803a09a5.245619f6@aol.com>  
Date: Mon, 26 Apr 1999 15:35:18 EDT  
Subject: twta's, twt's  
To: Old Tube Radios <boatanchors@theporch.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

Altho i still have some early gear and tubes, i am now active in the ham microwave game, esp above 24 ghz. I am looking for 10 ghz and higher twt/twta's and or power supplies. Need a Keltec supply capable of handling a 100 watt output tube., which will be as heavy as a boat anchor, almost. the amazing contacts among this group makes me ask, and twts are tubes.

Thanks, Will Santa Clara, CA

-----  
Message-ID: <3724C87E.6ECE1F7D@idirect.com>  
Date: Mon, 26 Apr 1999 16:11:42 -0400  
From: Jerry Proc <jproc@idirect.com>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
CC: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: The Great Marconi Caper  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

David Stinson wrote:

>  
> Is there any chance whatever that someone out there has  
> any information on the Canadian Marconi TH41B maritime transmitters?  
>  
>

Just a snippet Dave....

Mode : AM  
Frequency range : 2-28 Mhz  
Power requirement : 550v 3 phase AC mains

I'm sure this info must be on the nameplate at minimum.  
The RCN used these in fixed installations either with a rhombic or  
dipole antenna.

--

Regards,  
Jerry Proc VE3FAB jproc@idirect.com  
Web: [www3.sympatico.ca/hrc/haida](http://www3.sympatico.ca/hrc/haida)  
HMCS HAIDA Historic Naval Ship, Toronto Ontario

-----  
Message-ID: <3724CDDA.6DF81A0D@idirect.com>  
Date: Mon, 26 Apr 1999 16:34:34 -0400  
From: Jerry Proc <jproc@idirect.com>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: The Great Marconi Caper  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi ,

If anyone on the list knows Dave Stinson personally and can make a local  
phone call, could you please inform him that his mailbox is full and  
it's  
bouncing mail (to me for sure...maybe to others).

Thanks,

Jerry Proc VE3FAB jproc@idirect.com  
Web: www3.sympatico.ca/hrc/haida  
HMCS HAIDA Historic Naval Ship, Toronto Ontario

-----  
Message-ID: <003501be9031\$1f4586c0\$215d2299@default>  
From: "Paul Bernhard Sr." <w2tu@email.msn.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: info on FL2100 amp-Also FS BA's  
Date: Mon, 26 Apr 1999 18:07:04 -0400

Gentlemen;

Still looking for info on connections to the Yeasu FL2100 I hope to use at the USS Sullivans radio position. (For the special ops,etc.) I found the rly and E terminals to be for external T/R switch and by shorting them the amp goes into an op mode. Still no recognition of drive, just resting current. Do the ALC and E terminals have to be shorted also if not in use? I hate to start jumpering things without knowing the outcome. Thanks for any info.

Also, I still have a URM-25F and a OS8U scope with manuals I would like to get rid of before the Rochester Hamfest in June. Any interest?

Paul B. W2TU/NNNOGNB

w2tu@email.msn.com

-----  
From: W6cds@aol.com  
Message-ID: <4bb9c395.24563df8@aol.com>  
Date: Mon, 26 Apr 1999 18:08:56 EDT  
Subject: Old Sylvania Tube Manuals  
To: Old Tube Radios <boatanchors@theporch.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

Hi gang! Anyone interested in old tube manuals might want to check the three that I have for sale on eBay now. #96228267, 96234541 & 96228267  
Since I have no idea what they are worth, thought I'd throw them on the auction block and see what happens. 73, Charles W6CDS

-----  
Message-ID: <004a01be9033\$b9114080\$890cf4d0@0669u>  
From: "Thomas Lemar" <twl@ncccoast.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Info "Tower"  
Date: Mon, 26 Apr 1999 18:25:42 -0400  
MIME-Version: 1.0  
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Content-Type: text/plain;  
    charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

Hello everyone

I need info on the pin out of the power plug on a HW30 (Tower)  
Can anyone help me on this. I have one with no power cord.

Thanks  
Tom

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Content-Transfer-Encoding: quoted-printable

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<STYLE></STYLE>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT size=3D2>Hello everyone</FONT></DIV>
<DIV>&nbsp;</DIV>
<DIV><FONT size=3D2>I need info&nbsp;<on the pin out of the power plug =
on&nbsp;<a=20
HW30 (Tower)</FONT></DIV>
<DIV><FONT size=3D2>Can anyone help me on this. I have one with no power =
cord.</FONT></DIV>
<DIV>&nbsp;</DIV>
<DIV><FONT size=3D2>Thanks</FONT></DIV>
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<DIV><FONT size=3D2>Tom</FONT></DIV></BODY></HTML>

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Message-Id: <3.0.6.32.19990426200040.007bedb0@pop.voyager.net>

Date: Mon, 26 Apr 1999 20:00:40 -0500

To: Old Tube Radios <boatanchors@theporch.com>

From: Kim Herron <kherron@voyager.net>

Subject: Re: Receiver alignment-What did the factory use?

Cc: boatanchors@theporch.com

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

hi Gang,

>I suspect that the manufacturers built special-purpose equipment for  
>aligning receivers. Say, a bunch of rock-bound 455 kc oscillators.  
>Or, even a central one with output amplifiers driving a cable to each  
>workbench.

I have several pieces of Hammarlund factory service info and it specifies using a sweep generator for alignment. They also had diagrams that showed exact waveforms that should be present when sweeping the IF and using an oscilloscope to see the waveform.

The OEM manufacturer that I worked for in the late sixties had LOTS of lab quality test gear to align, repair and certify to military standards, the stuff we built. The expensive stuff stayed in QC (along with the standards that engineering built)

I would say, judging from the pictures that I've seen of old radio factories in many magazines, that the alignment stations had state of the art equipment at the time and always upgraded it as the designs changed. You can't make any money building radios that don't work properly because they aren't aligned right and you can't have one tech spend all day on one receiver. Test gear is expensive, but spread out over tens of thousands of receivers and transmitters the cost becomes very small indeed.

Kim W8ZV

-----  
Message-ID: <3725086A.D613D8BF@ix.netcom.com>

Date: Mon, 26 Apr 1999 19:44:26 -0500

From: David Stinson <arc5@ix.netcom.com>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Email Problem Fixed

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

If anyone has written me in the last two days,  
I had corrupted files in my email box.  
Some of the mail didn't make it.  
It's fixed now.  
Please resend.  
Thanks,  
Dave Stinson  
arc5@ix.netcom.com

-----  
From: "Roger A. McCarty" <rmccarty@earthlink.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Cc: "Old Tube Radios" <boatanchors@theporch.com>  
Subject: RE: Vintage Mobile rigs  
Date: Mon, 26 Apr 1999 17:49:41 -0700  
Message-ID: <000801be9047\$d59a75a0\$0100000a@accurate-main>  
MIME-Version: 1.0  
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Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

RE: Vintage Mobile rigsHi Buzz,

I see the problem. Somehow the tail end of each url was cut off. Go here;

<http://www.accurate-electronics.com/vintagemobile/>

and you will be able to pick and choose from the index.

73

Roger KD6CC  
-----Original Message-----  
From: Harrah, Wayne [mailto:Wayne.Harrah@wcom.com]  
Sent: Monday, April 26, 1999 12:06 PM  
To: 'rmccarty@earthlink.net'  
Subject: RE: Vintage Mobile rigs

Roger,

Thanks for the info, but, there ain't nothing there. Just got the dreaded "404- not found" message.

Buzz, ke0ms, the guy who started this thread.

```
> -----Original Message-----
> From: Roger A. McCarty [mailto:rmccarty@earthlink.net]
> Sent: Sunday, April 25, 1999 12:43 AM
> To: Old Tube Radios
> Subject: Vintage Mobile rigs
>
>
> I think I have found the oldest mobile rigs. Check out;
>
> http://www.accurate-electronics.com/vintagemobile/vintagemob
> ile.jpg
>
> and
>
> http://www.accurate-electronics.com/vintagemobile/vintagemob
> ile2.jpg
>
> and
>
> http://www.accurate-electronics.com/vintagemobile/radiolizz1
> .jpg
>
> 73
>
> Roger KD6CC
>
>
> Roger A. McCarty ARS KD6CC So. Calif.
> http://www.qsl.net/kd6cc
> http://www.qsl.net/kr6lp
> Qrp-L #1555 KR6LP #1
>
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Buzz,</SPAN></FONT></DIV>
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the problem. Somehow the tail end of each url was cut off. Go=20
here;</SPAN></FONT></DIV>
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class=3D660534700-27041999>and=20
you will be able to pick and choose from the index.</SPAN></FONT></DIV>
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<DIV><FONT color=3D#0000ff face=3DArial size=3D2><SPAN=20
class=3D660534700-27041999>73</SPAN></FONT></DIV>
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<DIV><FONT color=3D#0000ff face=3DArial size=3D2><SPAN =
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KD6CC</SPAN></FONT></DIV>
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[mailto:Wayne.Harrah@wcom.com]<BR><B>Sent:</B> Monday, April 26, 1999 =
12:06=20
PM<BR><B>To:</B> 'rmccarty@earthlink.net'<BR><B>Subject:</B> RE: Vintage =
Mobile=20
rigs<BR><BR></FONT></DIV>
<P><FONT size=3D2>Roger,</FONT> </P>
<P><FONT size=3D2>Thanks for the info, but, there ain't nothing =
there.&nbsp;  Just=20
got the dreaded "404- not found" message.</FONT> </P>
<P><FONT size=3D2>Buzz, ke0ms, the guy who started this thread.</FONT>=20
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From: Roger A. McCarty [<mailto:rmccarty@earthlink.net>]=  
</FONT>=20  
<BR><FONT size=3D2>&gt; Sent: Sunday, April 25, 1999 12:43 AM</FONT> =  
<BR><FONT=20  
size=3D2>&gt; To: Old Tube Radios</FONT> <BR><FONT size=3D2>&gt; =  
Subject: Vintage=20  
Mobile rigs</FONT> <BR><FONT size=3D2>&gt; </FONT><BR><FONT =  
size=3D2>&gt;=20  
</FONT><BR><FONT size=3D2>&gt; I think I have found the oldest mobile =  
rigs. Check=20  
out;</FONT> <BR><FONT size=3D2>&gt; </FONT><BR><FONT size=3D2>&gt; <A=20  
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size=3D2>&gt; Roger=20  
KD6CC</FONT> <BR><FONT size=3D2>&gt; </FONT><BR><FONT size=3D2>&gt; =  
</FONT><BR><FONT=20  
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Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Date: Mon, 26 Apr 1999 20:51:22 -0400  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>  
Subject: Performance Test: RCA Multicoupler

Hi Gang,

Here's my impression of the RCA multicoupler CU-5069, which I've now had a chance to check out. My unit came without a power cord, and an unusual connector, so I installed a standard computer-type AC power connector. This was very easy to do. I removed the slide-out circuit cage by disconnecting the two spade lugs (ground and  $-28V$ ), removing the four rear screws, and sliding the cage out the rear. Then I removed the rear panel. Five minutes with a file, and the AC connector slid into the existing hole for the Amphenol connector. I soldered the wires to it, reattached the rear panel, and I was done. Elapsed time: 30 minutes. While I had the card cage out, I washed it in the sink with warm water from the sprayer and dried it with a hair dryer. (None of the parts are water-sensitive).

After checking the fuses to make sure they were 1A (they were), I turned on the unit. The LV power supply produced a measured  $-26.1VDC$ . I set the trimpot on the power supply board to  $-28.0V$ , for no particular reason other than it was a nice round number. The power transformer is a pretty Hammond transformer, with taps for 26, 27, 28, and 29 V. Mine was set at 28V.

Here are some of the specifications I measured, with unit terminated in 50 ohms

Input Z: 50 ohms (nominal)

Output Z: 47-75 ohms, depending on frequency

Lower Frequency Limit: below 450 kHz (lower limit of my HP8640B)

Upper Frequency Limit: It began to roll off at about 26 MHz, and was 6 db down at 30 MHz.

Voltage Gain: 1.0 when terminated in 50 ohms

2.2 with open-circuit output (at 14 MHz). Slight frequency variation

Strong Signal Capability: No noticeable distortion on output waveform at 5 Volts P-P. It may be better than this, but that's as high as my signal generator would go. Pretty impressive!

Noise: None detectable! I couldn't hear any increase in noise level on my Signal One transceiver when I switched the unit on. Also, couldn't detect any overload or cross-mod, with a 160 meter inverted vee on the input, with strong local AM radio stations.

Gain Variation among 32 outputs: less than 5%, except for channel 27 on my unit, which was dead. I traced this to a bad transistor.

Circuit Description: I don't have a diagram, but the multicoupler appears very straightforward. Input from the antenna goes through a wideband transformer to a single stage 2N5160 amplifier, the output of which is amplified by a pair of 2N3866 transistors. The combined amplification factor of these two stages is a voltage gain of about 2.5. The transistors are all biased hard to preserve linearity, and consequently run hot, with large heatsinks.

The output from the two-stage amplifier is then distributed to the input of 32 identical single transistor stages (also 2N3866). These transistors are also biased hard, and run hot. They have a voltage gain of about 0.9, which leads me to believe they're probably just emitter followers, designed to give a 50 ohm output Z. The output of each of these amplifiers is routed to an output BNC connector, 32 in all.

On balance, I'm delighted with the multicoupler. I'll run cables around to each of my receivers, which will be very convenient. I think it's quite a bargain at \$150 (Canadian).

73,

Jim Garland W8ZR

-----  
Date: Mon, 26 Apr 1999 21:19:41 -0500 (EST)  
From: "Roberta J. Barmore" <rbarmore@indy.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
cc: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Receiver alignment-What did the factory use?  
Message-ID: <Pine.SUN.3.96.990426211109.29561B-100000@indy2>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi!

It just occurred to me that I have \*seen\* some prewar or wartime test gear from the Hallicrafters plant; in fact, I own one chunk of it.

They had one of the big GR or Boontoon Q-meters, with an external 1 mc/s source. Fellow in Chicago had the setup, and gave me the "external source." It's a highly modified Signal Shifter! Has a replacement variable condenser (big, solid job), a plate current meter on the final, and some kind of drive-adjust pot added. Not a bad way to go, especially if left on for long periods of time ('Shifters do, eventually, settle down

pretty well).

Chuck Dachis' book shows a few other purpose-built odds and ends of Halli test gear. So there's one answer to what the factory used in the Days Of Yore: the best stuff they could come up with. Reasonable accuracy is not hard to come by with simple equipment, if the user has some intelligence and ingenuity. (If Hank van Cleef doesn't chime in on this, interested readers are invited to scan back through the archives--look for his notes on working at Millen in the early-postwar years. It's fascinating stuff!)

73,  
--Bobbi

KB9GKX "RJ" rbarmore@indy.net Roberta J. (Bobbi) Barmore  
FISTS #3388 \* G-QRP #10001 \* ARRL \* RSGB \* WIA  
Appreciator Of Vacuum-Tube Ham Gear and Vintage Keys

-----  
Date: Mon, 26 Apr 1999 21:05:37 -0500 (EST)  
From: "Roberta J. Barmore" <rbarmore@indy.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
cc: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Receiver alignment-What did the factory use?  
Message-ID: <Pine.SUN.3.96.990426205344.29561A-100000@indy2>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi!

While I never worked at a receiver plant, I was a test equipment maintenance tech in an electronics factory some decades back, and just like the gang says, we spent \*money\* on the test stations and even more so on the QC gear that defined the basic standards; and that was a low-rent outfit that built subassemblies for other manufacturers!

You can't even build \*junk\* electronics without good test gear. :) (Proud boast of the plant was that we made some of the \*best\* cut-rate trash anywhere--and having seen what the competition was building, I can assure you it was true).

Quick general BA note: I'm a little scarce at presnt, between being digitally televised to a farethewell (the Jay Leno Show in HDTV starts tonight! Don't miss it if you can! It's history in the faking! ...Err, making. And my station \*has\* to tape delay the blamed thing, which is like having to pull your own teeth using a bent spoon and a broken beer bottle only not as nice...) annnd a rotten little electrical problem at home that has us running half the upstairs off extension cords and very sparingly, including the computers. (Oh, \*really\* don't ask--some kludge

where Joe Handyman hacked power to the garbage disposal off the same circuit that runs about half the house. Sixty-year-old basic wiring, a \*screamin'\* mess and we rent, or I'd fix it myself; but some headaches are best left to the happy masochists who choose to work as residential electricians).

73,  
--Bobbi

KB9GKX "RJ" rbarmore@indy.net Roberta J. (Bobbi) Barmore  
FISTS #3388 \* G-QRP #10001 \* ARRL \* RSGB \* WIA  
Appreciator Of Vacuum-Tube Ham Gear and Vintage Keys

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Message-ID: <37252B35.8032B538@vifp.monash.edu.au>  
Date: Tue, 27 Apr 1999 13:12:53 +1000  
From: Morris Odell <morriso@vifp.monash.edu.au>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Trochotron  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi all,

You may remember me posting a query last week regarding this device which turned up in an antique radio auction catalogue. Nobody replied to my post so I was still in a state of ignorance when I turned up at the auction and actually saw it.

There wasn't much to see. It looked like a miniature tube totally encased in a heavy tubular magnetic shroud about 2 inches high. On top there was a black plastic bulb that looked like a vulcanized condom. The base had lots of pins but no clue as to what they were. A few of us speculated as to what it could have been, some believing it was a photomultiplier. When the auction got going, the auctioneer (and the audience) didn't know what it was either and someone eventually bought it for a couple of dollars.

The answer turned out to be under my nose all along. I had looked it up in various old textbooks (Terman, etc) with no hits but on a hunch I looked in Millman & Taub's "Pulse, Digital and Switching Waveforms" - an old classic which still talked about vacuum tube pulse circuitry.

The trochotron or Beam-X switch is a decade counter tube which manipulates an electron beam along a trochoidal path to switch between 10 electrodes. It was usually paired with a nixie tube as an indicator. A trochoid is the name of the curve traced by electrons subjected to

combined electric and magnetic fields and is also the path traced out by a point on the circumference of a rolling wheel. I remembered reading about that term in descriptions of magnetron action. The trochotron could count up to 300 khz or so and had a very nifty mode of operation which I won't go into here. Suffice to say that designers in those days really knew a thing or two about juggling electrons in a vacuum!

The rest of the auction? One for the Atwater-Kent brigade. Incredibly overpriced entertainment radios and underpriced test gear. A Tek 502 went for \$20 and a couple of HP 410Cs with RF probes for around \$35 each. A Marconi TF995 signal generator (AM/FM to 225 MHz, high quality boatanchor) went for \$35. Dealers bought all the NOS tubes. A delapidated, modified, derelict 1940s mantel with a missing tube and an interesting wooden case in need of a lot of masterful restoration brought the top price of \$900!!! I spent \$4 on a Betty Boop mug for my daughter.

73 de Morris VK3DOC

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Message-Id: <199904270325.UAA27336@mail-gw.pacbell.net>  
From: "Arden Allen" <gumbear@pacbell.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Receiver alignment-What did the factory use?  
Date: Mon, 26 Apr 1999 20:28:39 -0700  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Hello Jim;

Usually small companies struggling in the low rent commercial section will scrimp on test equipment. I once visited an electric organ (musical type) factory that will remain nameless (probably went belly up long ago) that was full of Heath test equipment. I shuddered and wondered how they got along with the stuff. Companies on the road to success realize the value of having reliable and accurate test equipment and only want to avoid buying way over need. The cheapo stuff from early days can be found buried somewhere in the storage room waiting for a salvager to bring it to us!!

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

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Date: Mon, 26 Apr 1999 23:10:05 -0500 (CDT)  
From: Bill Hawkins <bill@iaxs.net>  
Message-Id: <199904270410.XAA16447@citrus.iaxs.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Trochotron

So that's what they are! Last summer I picked up a military FR 114/U frequency counter made by Winslow Electronics. It had 6 big nixie tubes and I was looking for something to build an electronic clock for a frequency standard. Imagine my dismay to see those big magnetic collars and beam switching tubes where there should have been nice little decade dividers that could be rewired into divide by 6 where required.

I have since found another HP 113 mechanical clock that is much quieter than the one that caused me to want to build an electronic clock (maybe the 1 KC motor needs new bearings). The trochotron counter cost me \$60. I'd be glad to pass it on to anyone who's nostalgic for beam switchers. Bit heavy for a counter with 6 of those things in it. Has lots of other tubes and a regulated power supply. It'll sit on the project shelf (ha! there's dozens of shelves) until I get desperate enough to rip out the heavy stuff and put in some sand-derived divider things.

Regards,  
Bill Hawkins

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Message-ID: <37254023.1CE5ADC9@bw.webex.net>  
Date: Tue, 27 Apr 1999 00:42:11 -0400  
From: Al Klase <skywaves@bw.webex.net>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
CC: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Receiver alignment-What did the factory use?  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Anchorites,

The latest AWA Old Timers Bulletin, Feb. '99, shows a young lady tweaking up an HRO at the National Factory in 1943 (page 55). On the bench are a General Radio 605 RF generator and another smaller GR instrument, probably an audio generator. She's looking off to the right, no doubt concentrating on an AC output meter. A decent signal generator and an output indicator are the specified instrument for receiver alignment for almost every tube-type communications receiver I've encountered.

The GR 605 is a true laboratory grade generator with good frequency accuracy, a calibrated attenuator, and metering of both output and modulation percentage. It dates to about 1936. It's the daddy of the GR 1001, which is in turn, a forerunner of the familiar HP-606.

Military TM's generally give lists of required test equipment none of which is junk. I worked in a maintenance depot at Pirmasens, Germany in the late '60's. We weren't allowed to work on equipment unless we had



the specified test gear. I'm pretty sure government inspectors required the same from the manufacturers.

Sweep alignment is a useful technique, but I don't think it was used much until you get to things like stagger-tuned IF's in FM sets.

73,  
Al

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Al Klase - N3FRQ  
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From: Peter\_Simpson@ne.3com.com  
To: Old Tube Radios <boatanchors@theporch.com>  
Message-ID: <85256760.003C24FD.00@usboxmta.ne.3com.com>  
Date: Tue, 27 Apr 1999 07:05:10 -0400  
Subject: Back from vacation in UK  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII

Hi gang -

Last week was school holiday week in MA, so with both children going off on school trips, my wife and I decided to take a trip of our own. We visited London and Paris, and had a wonderful time.

While in London, we took a couple of side trips, one of which might be of interest to the group here. We visited Bletchley Park, which was the center of the (successful) British efforts to intercept and decrypt a good amount of the Nazi radio traffic. This is a fascinating look into WWII crypto technology and well worth the hour train ride from London. They have excellent exhibits on the technology used by the Germans to encode and are rebuilding two of the machines designed by the British to speed the codebreaking process, the "bombe" and the "Colossus". The highlight of the visit for me was the opportunity to actually use one of the German "Enigma" units.

They also have a ham station on the grounds. More information at <<http://www.cranfield.ac.uk/cc/bpark>>.

Peter, KA1AXY

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End of BOATANCHORS Digest 2521

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